REMARKS

Claims 1-3 are pending in the instant application. Claim 1-3 have been rejected. Claim 1 has been amended. No new matter has been added by this amendment. Reconsideration is respectfully requested in light of the following remarks.

I. Rejection of Claims Under 35 U.S.C. §103

The Examiner has maintained the rejection of claims 1-3 under 35 U.S.C. §103(a) as being unpatentable over Coligan et al. (Current Protocols in Immunology, Green Publishing Associates and Wiley-Interscience, New York, 1991; pages 2.1.1-2.1.3, 2.1.9-2.1.11, and 2.1.17-2.1.22) in view of U.S. Patent 5,077,216, and Zwaldo et al. (IDS Reference BA). The Examiner suggests that it would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the antibodies taught in the '216 patent and Zwaldo et al. in the ELISA taught by Coligan et al. to detect and monitor CD163 levels in a biological sample during an inflammatory condition/process by detecting CD163 as taught by Zwaldo et al. Further, the Examiner suggests that one of ordinary skill in the art would have been motivated to substitute the antibodies taught in the '216 patent and Zwaldo et al. in the ELISA taught by Coligan et al. to detect and monitor CD163 because detecting CD163 levels can be used to monitor an inflammatory response cascade in a patient, as taught by Zwaldo et al.

The Examiner suggests Applicants arguments filed 7/23/03 were not persuasive because unobviousness cannot be established by attacking the cited references individually when the rejection is based on the combination of references. Further, the Examiner

finds that the instant claims are drawn to a method for monitoring an inflammatory response cascade in a patient by detecting CD163 and that there is no recitation in the claims that CD163 is useful for monitoring an early signaling event. Moreover, the Examiner suggests that the ABCAM catalog teaches that anti-CD163 antibody product reacts with CD163 that is also p155 and that this product was used in 1988 by Morganelli et al.

Applicants respectfully traverse this rejection.

In an effort to advance the prosecution of this application, Applicants have amended claim 1 to recite the limitation that the method of the invention is for monitoring an early signaling event in an inflammatory response cascade in a patient. While the cited references teach certain aspects of the claimed invention, none of these references, when combined, teach that CD163 is useful for monitoring an early signaling event in an inflammatory response cascade in a patient. In fact, Zwaldo et al. teaches away from the present invention in teaching that the RM3/1 antigen (*i.e.*, CD163) is a surface antigen which is preferentially expressed by macrophages appearing late in the inflammatory response in acute inflammatory tissue, *e.g.* gingivitis, and to varying degrees in chronic inflammation. Zwaldo et al. conclude that the RM3/1 antibody detects a macrophage phenotype which seems to be associated with the healing phase of the inflammatory process. As Coligan et al. and patent '216 do not teach temporal regulation of CD163 and Zwaldo et al. teach that CD163 is associated with the late or healing phase of the inflammatory process, the combined references do not teach the claim limitation that CD163 is useful for monitoring an early signaling event in an inflammatory response cascade. Thus,

as required by MPEP § 2143, the prior art references do not teach or suggest all the claim limitations to establish a *prima facie* case of obviousness.

Applicants respectfully disagree with the Examiner's assertion that it would have been obvious to one of skill in the art at the time of filing that p155 and CD163 were one and the same protein. While the ABCAM antibodies (described by the Examiner) and the Maine Biotechnology antibodies (cited by Applicants) where readily available at the time of filing, it is not clear whether the catalogs at the time of filing indicated that p155 and CD163 were one and the same protein recognized by the antibody products. It is well-known to one of skill that company catalogs are regularly revised and updated to reflect the current teachings in the art. For example, the excerpt from the ABCAM catalog was from a post-filing date of September 2003. Without having read the catalog from 2000, it is not known whether the 2000 ABCAM catalog supplied an antibody which specifically recognized p155, CD163, or p155/CD163. Further, while the antibody product of the ABCAM catalog was used by Morganelli et al., Morganelli et al. does not indicate that the detected protein was CD163, rather this reference indicates that the antibody had specificity for p155. It is only within view of the teachings of the instant specification that the skilled artisan would conclude that the RM3/1 antigen (*i.e.*, CD163) and p155 were the same protein and therefore be motivated to use the cited antibodies in a detection assay for CD163 to monitor an <u>early</u> signaling event in an inflammatory response cascade. Accordingly, withdrawal of this rejection is respectfully requested.

II. Conclusion

The Applicants believe that the foregoing comprises a full and complete response to the Office Action of record. Accordingly, favorable reconsideration and subsequent allowance of the pending claims is earnestly solicited.

Respectfully submitted,

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